3D

CONSTRUCTION
KIT USERS GROUP

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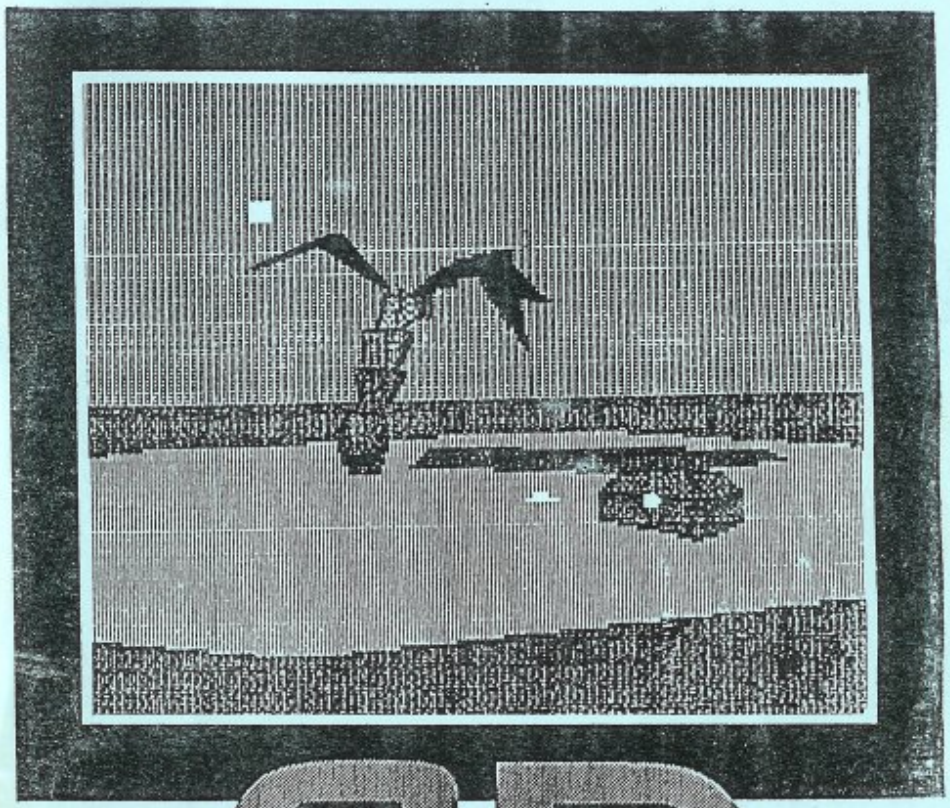

# 3D CONSTRUCTION KIT USERS GROUP

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**CORRESPONDENCE.** All correspondence addressed to the User Group will be assumed to be for publication unless otherwise stated. If you want a personal reply to a letter then please enclose a S.A.E. otherwise replies will be published in the pages of the newsletter.

**CONTRIBUTIONS** are always welcome from members. Hints, tips, routines or anything else that you think would be of interest to other members are most welcome. It is your club so we want to hear from you. If there is anything in particular that you would like to see covered in the newsletter then please let me know.

**BACK ISSUES.** If you have missed any issues they are all still available at a cost each of £2 (UK), £2.50 (Europe),£3 (Rest of World).

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## HELPLINES

### POSTAL HELP

If you wish to write in for help then please feel free to do so but please don't forget to enclose a stamped, self-addressed envelope and I will do my best to solve the problem.

### TELEPHONE HELPLINE

0492 877305

If you need to telephone me for help then I will try to be available during the hours between 2pm and 7pm each weekday and will be delighted to hear from you and will, of course, do my very best to help with any problems you may have. As this telephone helpline is available only to members of the User Group, please do have your Registration Number handy and give your name when you call.

### FACSIMILE

If anyone finds it more convenient to send a Fax then please feel free to do so. The telephone number is the same as that for the telephone helpline. Requests needing a reply should be by letter enclosing SAE.

Please address all correspondence to:


**Mandy Rodrigues**
**The 3D Construction Kit User Group**
**67 Lloyd Street, Llandudno, Gwynedd, LL30 2YP**


The 3D Construction Kit User Club is an independently run club but is under license from Incentive Software.

# EDITORIAL

Welcome to issue 5 of the 3D Construction Kit User Group Newsletter.

Since I last spoke to you I have been checking out the games and routines etc that have been sent for the PD Library. Many of them are of exceptional quality. In this issue I have given a brief review of each of them, so from this issue you can all send for them and find out what other users have been doing. Of course there are only a few on offer at the moment but I hope that you can remedy that. If you are interested in Public Domain programs (in particular, adventure games), then I will be delighted to send you a list of ALL the PD games I handle through Adventure Probe magazine also.

Also in this issue (and because of numerous requests to put many poor souls out of their misery), there is the full and complete step by step solution to the 16-bit version of the Kitgame. Perhaps an 8-bit member would like to send in the solution to the 8-bit version for publication in the next issue? As I have mentioned previously, if there is any particular aspect of the 3D Kit program that you would like to see covered in the Newsletters then please let me know.

As I mentioned in the last Newsletter the Archimedes version of the Kit is now out and Archimedes owners are joining the User Group. This version of the Kit is almost identical to the other 16-bit versions, apart from one or two machine specific items such as loading etc, so I know that Archimedes users will get just as much help from the Newsletters as users of the other computers do.

Hopefully, more of you will send in your routines, articles, hints, tips and problems for the next newsletter which will be the April/May issue (No.6). The more material I receive the more interesting and bigger the Newsletters will be so please do your best. I hope to have an interview with the programmers in that issue so, if you have any questions for them why not send them in and I will incorporate them in the interview?!

I have not, yet, had a firm release date for the new "Professional" version of the Kit. So many of you have been asking about it recently that I have been in contact with the programmers about it to see how things are progressing. The news I have is that it shouldn't be too long now and that "it will be well worth the wait!" - the programmers seem very excited about it so it seems that we have a great treat in store when we do finally get our eager hands on it. I will give you more news on this just as soon as I get it so watch this space. There are going to be many new additional features and lots of ideas that YOU have sent in will be incorporated. It was kind of so many of you to take an active interest and I would like to thank those of you who sent in your ideas, suggestions, moans and pleas about what you would like to see (or not see). All information was passed on and the programmers have taken note of everything you had to say. Ideas for the kind of Objects that you would like to have provided "ready made" are also needed for extra utility disks so do get in touch.

That gives me an idea! Why don't you clever people design various objects and send them to me so that I can make PD disks of them for the library? Well, that's all from me for this time. I will see you all again in April and meanwhile, I hope you enjoy this issue.

*Mandy*



# LETTERS

## *Dear Mandy*

My congratulations to you and the other hard working people that have made the 3D Construction Kit possible. This is an excellent program with an easy to use interface that has been needed in the Amiga community for quite some time. My apologies for having taken so long to turn in my registration. I have been quite busy of late and wanted to take some time to try out the program before getting in touch with you. If it is possible, I would like to obtain a copy of this program that works with NTSC (the version I currently possess works fine in NTSC until I try to test the game I have created, then I loose the bottom portion of the screen; this is correctable if I boot in PAL mode, but I would prefer to be able to do all my work in NTSC if possible). I would also like to see some local support in the U.S. for this product. Again, my congratulations on a fine product. I look forward to hearing about future enhancements, upgrades and other news via the Newsletter.

*Mark Whitaker*, Washington, U.S.A.

AMIGA VERSION

*I'm glad you are so pleased with the program, Mark. However, I cannot take any credit for it as it was entirely the creation of Incentive's excellent programmers. I just did some work on it after it was finished. There will be a new NTSC version out in the States very shortly although it will not be called 3D Construction Kit but The Virtual Reality Studio (quite a nice name for it too, I think). It should be out by the time you read this and is, I understand, entirely NTSC. I hope it solves your problems. I don't know of any local groups in your part of the world I'm afraid.....Mandy*

## *Dear Mandy*

I am a Dutch artist working with photography and computers. I really like the 3D Kit software, mainly because of my Cyberspace interests. I have only one problem with the software, I can't make a working copy as described on page 3 of your manual. It gives a disk error and results in a non working copy. So I am sending you a disk in a S.A.E. with a request that you can send me a working copy. Thank you very much and I hope the success of the User Group and the 3D Kit will grow perhaps with a Cyber Helmet to enjoy the strange new worlds even more.

*Peter Harmus*, Rotterdam, Netherlands.

ATARI ST VERSION

*It seems that a few of version V1.10 are still getting through to the customers, Peter. I can't send you a "working copy" but I am sending you a new version V1.20 so you can make your own. I had a vision of myself typing the Newsletter whilst adorned with a Cyber Helmet after reading your letter! Had to chuckle at the thought.....Mandy*

## *Dear Mandy*

I enclose a few notes on the 3D Kit for the Archimedes. I ordered the 3D Construction Kit for my Archimedes (A420/1) in December. Delayed by packaging problems, it was sent at the end of January. The stout box held a 20 minute demo and tutorial video covering 8-16-32 bit versions, registration card etc and the program. The disk was not copy protected. The Kit is great fun. The control panel is complex, but includes UNDO. It behaves like a 3D version of Draw. It does not ray-trace! You start with a set of simple flat and solid shapes, then stretch, move, duplicate and stack them. It uses 1/2 cm units, but only triangles and your view can be rotated. All else must be NS or EW. The version 1.0 Kit is more LEGO than CAD, but Domark promise better to come. The Freescape Control Language provides easy

animation and events. Play the Demo game, then explore it for ideas and 3D clip art. My version is single tasking, like the original PC Emulator. It needs at least 700K of Applications RAM. The manual explains how to fit it into 1Mb machines. It does not recognise a RAM disk. On exit, it returns to an intact desk-top. The environment is very PC, with pull-down menus and short-cut icons. The filing facilities are adequate. Up and Down tree buttons simplify directory searches. Objects, methods, data etc have their own prefixes so each part of the program knows its own files. There is one minor bug in the Save-File menu. You have to click off to the right of the NAME? prompt before a blank text box appears. I spent 45 frantic minutes finding this! The object editor is easy to use at first. Objects may be grouped, and moved as a set. Multiple areas provide isolation. Things get tricky when the number of objects increases. Cuboid34, Pyramid12, Group5, Routine43 is the editor's best. Objects are not named, and Grouped objects not indented or flagged. You need to access the Group editor and keep notes. Alas, there is no obvious LIST facility, and Edit can't read the files. Perhaps the official Kit User Group will offer some answers. Version 1.0 is great fun. Think of it as a 3D version of Draw, with those vital utilities still to come. Don't tackle a big project without careful planning. Domark promise library disks and support.

***Nic Kelly***, Liverpool.

ARCHIMEDES VERSION

*I am delighted to welcome our first Archimedes Kit user to our friendly Group. Thank you for sharing your thoughts on the Archimedes version of the Kit with us, Nic. I will make sure that the programmers receive a copy so that anything that needs attention can be dealt with. You should be able to name your objects via the Object Attributes option. Select the Attributes then select the object you want to name. Click on the existing name and type in what you want. It should make life much easier for you.....Mandy*

## *Dear Mandy*

I was very impressed by the sample Newsletter (No 4) you sent me so here's my subscription order and cheque. Is it possible to get back issues of the Newsletter? I am a programmer by profession so it is a bit embarassing to admit I have a couple of (probably stupid) questions to ask. What are the CCR flags? Could you explain about the logical AND, NOT and OR as used by ANDV, NOTV and ORV? I haven't had reason to use these yet, but it would help to know what to do with them. Thank you for your time and I look forward to some interesting construction in future.

***Stephen Gill***, Camberley, Surrey.

PC VERSION

*The CCR flags are the CONDITION CODE REGISTER flags. They keep track of what is happening during your games. If the FCL (Freescape Command Language) commands perform an addition or subtraction the CCR flags will be set according to the result. For example if using ADDVAR with two variables and the result is 10 then the commands will check the CCR flags to see what is stored in them and act accordingly. To give you an idea of the logical ANDV etc; if you supply two variables the binery contents are ANDed together and the result is stored in the second variable.....Mandy*

## *Dear Mandy*

Having got the 3D Kit for Christmas, I have now stopped using it long enough to send in the registration etc. There are a few minor queries that I hope you will be able to answer. The 16 bit versions of the Kit are intended for mouse operation whilst for the 8 bit versions



(like mine) a joystick is assumed. Is it possible to use a mouse with the Amstrad CPC version? Would this require special software to be used in conjunction with the Kit? Is it possible to output from the program to a printer, either hard copies of the graphics or listings of the areas, objects etc? Is it possible to copy objects from one area to another or to copy a complete area to be further edited as a new area? Is it possible to re-number areas? Is there a way of merging areas from a file on disc with areas from another file which has already been loaded? Finally I have some comments arising from my (so far limited) experience of using the program which may be of interest to the publishers. These are concerned with the CREATE and EDIT etc. routines. The list of objects gives only the numbers of each and the primative type (cube, rectangle etc.); with a list of 20 or 30 objects it is not easy to keep track of which is which and so it would be useful to be able to add a short code of a few letters against each as a reminder. This also applies to a lesser extent to the Area Menu. A further perhaps trivial, point is that selection of an object for editing always begins with the cursor set at EXIT (before the start of the list) whereas the object to be edited in almost every case is the most recently created (at the other end). It would have saved a little time for each editing operation if the cursor start position had been set after the list. These comments are intended to be constructive and I hope they will be recognised as such. I realise that some of the features are determined by the limitations of the hardware, which the Kit is obviously "stretching" to the full. In particular, I would not wish the comments to detract from my view that it is an excellent piece of software.

***Stewart Hughes***, Heckmondwike, W Yorks.

AMSTRAD CPC6128

*Whew! That's quite a list of questions you have, Stewart. Due to the amount of memory that is used by the program itself it wasn't possible to program to allow the use of a mouse on the 8 bit version. It isn't possible either to print out the conditions etc from that version. The option to copy objects from one area to another or copy areas is only possible on the 16 bit versions (ie. saving the whole area as an object and loading it in to another blank area), due to the memory restrictions, I'm afraid. There is no way to merge areas as when new data is loaded it overwrites the existing data in memory. I regret to say that the ability to rename objects and areas is also confined to the 16 bit versions of the Kit. As you surmised the whole problem is shortage of memory on the 8 bit versions. The reason the programmers chose to put the cursor on the EXIT command on the object list was because it really was more convenient, especially if the user entered the list by mistake, they could get out again immediately without doing any further unwanted operations. Looking on the positive side, though, just read some of the 8 bit routines in the Newsletters to see just how much you can do with the Kit!.....Mandy*

## *Dear Mandy*

Enclosed is my subscription for the User Group and registration. We have been using the Kit for nearly one month now and think it is a very powerful tool which is so easy to use! Our Blue Danube Atari Club, which has existed since 1986 covers Atari VCS, XL/XE, ST/TT and Lynx. The next issue of our newsletter will be in March and will contain a review of the 3D Kit. We will send you this with pleasure. Our first game, produced with the Kit, will be finished in about eight weeks (we'll let you know). Meanwhile we would like to send greetings to all colleagues and members of the 3D Kit User Group!

***Dieter Konig***, President:

BLUE DANUBE ATARI CLUB, JAXSTRABE 6, A-8642 ST LORENZEN, AUSTRIA

*Thank you for your friendly greetings. I have printed the full address of your Atari Club here so that any other Atari owners in Austria can contact you for membership if they wish.....Mandy*

### Dear Mandy

Please send me addresses or telephone numbers of Dutch users, preferably in my home town or nearby.

**Aldo Quispel,**
ZOETERWOUDSESINGEL 29, 2313 EJ LEIDEN, NETHERLANDS

*It would be very wrong of me to send out any names or addresses of members of the User Group without their permission. I am sure you understand that unless permission is given the information remains confidential and it is for that reason that I do not print the full address of any member after the letters or problems etc. that appear in the Newsletters. I have printed your address in full (as you obviously want contact with other members) and any Dutch members can now contact you if they so wish. If anyone else would like to make contact in this way then I will publish their name and address within the Newsletter but I cannot send out any information on members..Mandy*

### Dear Mandy

There seems to be a bug with the PC version we have of the Kit program. When trying to exit (CGA version running but VGA, EGA drivers also loaded). When quitting with software it does not - it only goes back to the initial menu to select parameters. Is there an update to cure this?

**John Barberio**, Oxford.
PC VERSION

*I understand the irritation that this causes you, John. Quite a few other members have mentioned this. I have passed on their comments to the programmers and I hope that they will take care of this within the "Professional" Version that is being prepared at present. Unfortunately, for the time being there is no solution.....Mandy*

### Dear Mandy

I just acquired the 3D Construction Kit and I find it to be a very exciting product. However the package I bought contains two errors: There are 2 3.5" diskettes: Disk 1 for CGA and VGA and Disk 2 for EGA. I use VGA card and monitor. Therefore 3DKit was installed from Disk 1 on the hard disk. In the introductory menu there is no option for VGA, although the program files do exist. What is the reason? Also what is the reason for having to supply the four options (language, monitor, mouse and sound) EVERYTIME I run 3DKit? Isn't there a shortcut?

**Elie Assouad**, Paris, France
PC VERSION

*As you will see from the previous letter, others have complained about the latter problem you mention. The reason for the lack of VGA option is that the very first versions of the Kit did not support VGA and this was added later - well I presume that the option is missing from the introductory menu for this reason. I have mentioned this to Domark and the programmers and am assured that they will look into this.....Mandy*

### Dear Mandy

I received issue 4 of the Newsletter on December 24th and your Christmas greetings were wonderful. The reason I write to you is because of your reply to the letter from Andy Caldwell. You told him (and us) that there would be a "Professional" version of the 3DCK. This sounds great to me and I hope that with this release it is also



possible to rotate objects so that we could animate the rotors of a helicopter or let the head of a robot turn left or right. I have a feeling that we might have to wait a long time for this new version, haven't we? So now I come to the point: Thinking also that it is impossible to incorporate more than one border, or to load a new datafile, it would be a good idea I think, if the programmers at Incentive could make it possible to leave the runtime module by activating a new command such as EXIT. That would have the effect that one could write part 1 of an adventure with a space shuttle border and when the adventurer has solved the main problems, we could leave the runtime module and start part two with a second border and another datafile. The only thing the programmer needs is a shell that calls first part 1 and then part 2 and this could be easily done with a compiled GFA-Basic or C program. What do you think?

**Oliver Dorloechter**, Germany

*I don't think we will have to wait very long for the "Professional" version of the Kit, Oliver, as the programmers are completing work on it at the moment. I am sure that, as this will allow for users to add their own machine code programs etc to the program, that loading in borders and different datafiles will be catered for. I don't know yet if the rotation of objects will be allowed for in that version. I will bring you news of the new version just as soon as I get a release date.....Mandy*

### Dear Mandy

We have an idea on how to make a game-like PC program which shows how to build a stamp collection. One way, a rather good one, is to make this using the 3D Construction Kit. In the manual you say that it is possible to make stand alone runnable environments and to freely distribute the games, but this is mentioned only under the Atari ST and Amiga section on the MAKE command. If we use the PC version is it also possible to have free distribution in the same way? There is no mention of this under the PC section.

**Petteri Hannula**, President
FEDERATION OF YOUTH FINNISH PHILATELIST, Finland
PC VERSION

*Yes, of course you may freely distribute your completed programs on ALL versions of the Kit providing that you acknowledge that the 3D Kit was used to write the program. My apologies for not repeating this under the section on the PC MAKE instructions.....Mandy*

### Dear Mandy

I must say how nice it is to see a Newsletter where ALL the members can contribute items. It not only makes the Newsletters more interesting (no disrespect to your good self), but also seems to be so much friendlier. I am busy working on some routines that I will send you shortly. Thank you for your encouragement!

**Peter Randolph**, Tamworth, Staffs.

*I try to encourage EVERYONE to feel free to send in contributions for the Newsletters, whether it is just the odd hint or tip or a full-blown article. In fact, the more material I receive the better for us all as we will have a wider range of ideas, the Newsletters will certainly be bigger if I get a lot of material for one particular issue and the more active interest the User Group receives the longer it will continue to thrive. Please, everyone, if you have anything that you would like to share with the other users then do not hesitate to sent them in. Don't be shy! We would love to hear from you....Mandy*

MORE LETTERS NEXT TIME!

**********

# THE KITGAME

## 16-BIT STEP-BY-STEP SOLUTION

By *Mandy* played on Amiga

WARNING! If you haven't yet played the Kitgame for yourself, reading the following solution can seriously damage your enjoyment of the game! The solution has been written in easy sections so that if you get stuck on a particular section you can get help without reading too far and getting information that you DON'T want!

You start the game in the central Courtyard of the strange planet you find yourself marooned on and your objective is to try to find the means to escape - with treasure if you possibly can.

Move towards the door you see on the left hand side of your position and ACTIVATE the doorknob (using the right mouse button). When the door opens go inside and immediately SHOOT the Dragon's nose (using the left mouse button) until he stops shooting at you. Don't proceed further into the room yet as there is a force-field in operation further along towards the Dragon. There is a gold bar here but we must get it another way.

Return to the Courtyard and you are facing the door to the Kiosk. Move towards it and ACTIVATE the door to open it. Walk inside and walk right up to the Alien behind the counter. ACTIVATE the Alien to receive the message "Five gold bars if you want to buy my Scuba Gear". Move towards the left of the screen then forwards until you are positioned behind the counter at the back of the Kiosk. Lower yourself down (right mouse button on the arrow below the eye) and you will see a secret passage.

SHOOT the blue rectangle you see in the passage and it will open to reveal a trapdoor. Walk along the passage until you fall down the trapdoor and you find yourself in another passage which leads to another entrance to the Dragon Room. Walk along this passage and ascend the stairs at the far end and you will find yourself inside the mouth of the Dragon. Carefully walk forwards until you fall out of the mouth and immediately look down and you will see a gold bar. Take this (GOLD BAR 1!) and turn yourself towards the right until you see a small yellow square on the wall of the room. Walk towards this and when close enough, ACTIVATE it twice (or until it changes to blue) and you will receive the message "Forcefield deactivated). Move towards the left and you will see the exit along the hall in front of you (the door you first entered). Go towards the door and exit to the Courtyard.

Move towards the right a little until you face the steps to the right of the Kiosk. "Bump" yourself up them and turn to the left to face the roof of the Kiosk. Go onto the roof and you will see three blue pyramids and a gold cube towards the left side of the roof. Shoot the pyramid farthest from you and you will see that it changes colour to yellow and the gold cube vanishes to be replaced with a blue cube towards the right of the roof. Shoot the blue cube and then shoot the centre pyramid and then the pyramid nearest to you. They will all vanish to be replaced with a bar of gold. Take this (GOLD BAR 2!).



Now turn towards the right and move towards the edge of the roof until you see a stack of "boxes" coloured pink, orange and blue (x2). Shoot these in turn and the smaller boxes which appear until a doorway appears on the wall behind them. Return down the stairs and move to the back of the Kiosk and position yourself so you are facing this door (which leads to the Puzzle Zone).

Enter this doorway and lower yourself down and crawl carefully along the girders, carefully timing yourself to pass between the swinging orange/red cubes until you come to the orange platform at the end. Turn yourself towards the right until you can see the floating yellow platform with the red object on top and wait until it is near enough to you to ACTIVATE the object to obtain a coil of rope. Turn yourself once more until you are facing the girder and carefully make your way back through the swinging cubes and to the doorway once more. Go through back to the Courtyard.

Once outside (facing the rear of the Kiosk), make your way towards the right until you see a blue/green archway. Go to this and lower yourself down to fit into it and enter. Immediately shoot the orange triangles which shoot at you and crawl through the tunnel to the other side to find yourself on Beachy Head.

There is a gold bar hidden just behind the first tree that you see on entering this area so make your way towards it and take this (GOLD BAR 3!). Raise yourself up and turn to face the signpost that you see on the edge of the cliff. Walk towards it and, when close enough, ACTIVATE the post. The program takes over for a while as you tie the rope to the post and descend the cliff safely to land in the small dinghy at the base of the cliff. Look down until you see the outboard motor and rudder handle and ACTIVATE this handle to start another animated sequence which will start you sailing over the sea towards the lighthouse in the distance. As soon as you set off, turn yourself towards the left so that you can see the rocks just in front and near the lighthouse. Keep positioning yourself so that you can see the base of them and as you sail past quickly ACTIVATE the gold bar that you see at the base of the rocks (GOLD BAR 4!).

When the boat reaches the steps at the lighthouse and stops, go forward and up the steps onto the base of the lighthouse. Walk around towards the back (carefully!) and ACTIVATE the small brown square that you see next to the door. The door will open and you should then carefully make your way inside to the Changing Room. Inside you will see a small white rectangle lying on the chair. ACTIVATE this to find it is a note with the message "The Exit Pass was blown overboard!". Move towards the sink and ACTIVATE either of the taps to receive the message "You freshen up". Turn around and leave the Changing Room. Go outside and step into the sea! Walk forwards until you are transported through a short tunnel to find yourself on a Desert Island!

There on the sand is a gold bar, ACTIVATE this (GOLD BAR 5!). Look up at the Palm Tree and SHOOT the coconut you see there. It will fall and open up. Move towards it and ACTIVATE it to receive the message "You eat the coconut and are refreshed" and your Energy is replenished! (check Energy Bar at top of screen!). Take the wooden key that is also lying near where the coconut fell. Now make your way until you

are standing in front of the Palm Tree (so that it is leaning slightly away from you) and climb the tree (bump your way up it!) and you will find a Gold Key hidden at the top. Take this and climb down once more. Now make your way towards the chest you see on the sand and ACTIVATE the lock when you are close enough. The gold key opens it. Climb into the chest and you are transported (in a puff of smoke) back to the Lighthouse and find yourself near the steps down to your dinghy.

Carefully make your way into the dinghy and ACTIVATE the motor once more. You will be transported (via the animation sequence) back to the base of the cliffs. Turn so you can see your rope and ACTIVATE the rope to climb back up the cliffs once more. Make your way back towards the tunnel entrance. Enter and once more, shoot the yellow triangles that shoot at you, and go through the tunnel back to the Courtyard. Walk around to the front of the Kiosk and enter it. Walk to the Alien and ACTIVATE him to swap the five gold bars for the Scuba Diving Suit!

Now make your way back to Beachy Head via the Tunnel and remembering to shoot the triangles as soon as you enter. Once through, turn and make your way back to the signpost. When near enough ACTIVATE the post to get back down the cliffs to the dinghy. ACTIVATE the outboard motor once more and sail back to the Lighthouse. Go up the steps and carefully make your way round to enter the Changing Room once more. As soon as you enter you will receive the message "You put the Scuba Gear on!). Exit the Lighthouse and jump into the sea. Walk forwards until you sink to The Bottom of the Sea.

Walk forwards a little, straighten up your "vision" via the centre eye icon and turn around until you see a Shark. Wait until it is close enough (or walk towards it) and carefully SHOOT the little Golden Fish that is swimming beneath the Shark. (Make sure you don't shoot the Shark by mistake as you will get bitten and lose a lot of energy!) When you shoot the golden fish you will receive the Exit Pass. As soon as you receive this raise yourself up by clicking on the upper arrow over the eye icon with the right mouse button and you will float up and be transported back to the Lighthouse steps.

Make your way back into the Changing Room in the Lighthouse to change back into your "Normal Gear" and make your way (carefully) back to the dinghy.

ACTIVATE the outboard motor and sail back to the cliffs. Climb up the cliffs by ACTIVATING the rope and head back towards the tunnel. This time there is a surprise for you - the tunnel is filled with gold bars! Shoot the triangles that shoot at you and collect all the gold bars as you make your way through the tunnel back to the Courtyard. Once there, make your way around the Kiosk until you find the large doorway (it was behind you when you started play) and go through it to the Shuttle Launching Pad.

Walk towards the golden triangle you see on the far wall alongside the black slot and ACTIVATE this. The barrier will lift and you will gain access to the Shuttle. Walk towards the Shuttle (ACTIVATE if necessary) and you will receive the message "You board the Shuttle", a beautiful animation sequence follows showing the Shuttle gliding upwards into space and you receive the final message....

"CONGRATULATIONS! YOU HAVE ESCAPED!"



## THE P.D.LIBRARY!

At last we have the PD Library up and running! Here are some short reviews of what we have on offer so far:

**DARKNESS CALLS** - STAND ALONE PROGRAM.
This was written on the AMIGA by JAMES H. YUSUF. You start the game in your Eurocorp Patrol Craft which has landed on the planet Titan. Your task is to equip yourself and explore the planet and the Research Station in order to shut down the Reactor and locate the workers there. You have just one hour in which to do so. The game starts with an excellent loading screen and you have the options to go straight into the game or to view the information screens which are accessed through CLI windows. The information screens give the game instructions (the objective and background story), information on handling objects etc and the controls. There are some excellent music and sound effects once you get into the game. You can hear yourself breathing through your spacesuit and I have to say that these sound effects, coupled with the excellently drawn environment really lend an eerie atmosphere to the game. The game is most enjoyable as there is lots to see and tons of things to do to keep you busy for ages.

**DARKNESS CALLS** - DATA DISK.
This disk by JAMES H. YUSUF for the AMIGA contains the border and a file of all the objects used in the program as described above. I think you will find these most useful.

**PLANET OF THE DALEKS** - DATAFILE AND BORDER.
This AMIGA game written by STEVE HILDER is a must for all Dr Who fans. Steve has thoughtfully sent this in as a datafile and border so that you can load them into your 3D Kit and view the data. A good atmosphere is generated by the opening area which shows a lonely street in the dead of night which is eerily lit by street lamps. Your Tardis is immediately visible but entering it is another matter! Once inside you need to explore to find the necessary power crystals to activate the Tardis to take you to the planet Skaro where the main action takes place. Once there Dalek fans will immediately recognise the Dalek-shaped doorways which lead into the interior of the planet. Steve has created some excellent Daleks and Dalek type devices and machinery. There is lots to see and do and I found this a most enjoyable game. Getting into the Dalek complex isn't quite as easy as you might expect as there are loads of entrances hidden all over the surface of the planet and there are loads of very realistic Daleks to contend with - the blasted things keep popping up all over the place!

**E.F.T.P.O.T.C.M** - STAND ALONE PROG.
(ESCAPE FROM THE PLANET OF THE CARDBOARD MONSTERS!)
This game was written for the AMIGA by ANDREW HERBERT who admits that it isn't the best game he has produced but "Will show other users how to present their work using IFF pictures, soundmodules and utilities and may help people who haven't got a clue about programming start-up sequences or keymaps". Andrew has thoughtfully included on the disk a load of useful utilities that will help Amiga users to do just that as it contains such utilities as PICSHOW - this shows a standard IFF picture. PICEND - ends a standard IFF picture. BIGCLI, SETMAP and TBAR. There is also NOISEPLAYER - which runs music modules. There are two modules - MOD.DARK and MOD.RAP. What about E.F.T.P.O.T.C.M.? Well the program has a good loading screen and extremely good sound effects of a storm raging with heavy rainfall which is followed by some excellent music. An option for viewing the instructions is also offered. From what I have seen of the game I was quite impressed at

this first attempt. Unfortunately I could do no more that discover a key and a chisel before my time ran out so I couldn't explore further to discover how to use them! I'll crack it yet though!

## AMIGA BORDERS

This disk contains a selection of borders created by A.J.BEVAN which should be most useful for those who are not very artistic. I did find that a couple of them were a bit of a problem to load but I just loaded in DELUXE PAINT, loaded in the borders one by one and saved them out again and after that they loaded into the 3D Construction Kit program without any difficulty at all. Most useful to have on hand.

## INFILTRATION - STAND ALONE PROG

A program written by ROBIN BALL on the ATARI ST. The game received a score of 70% in a review in ST FORMAT. This game is actually SHAREWARE which means that you should register with Robin and you will receive an excellently drawn map, a Secret Weapon Voucher and a beautifully drawn picture of the Spaceship orbiting a planet. This game is so well thought out that the many really devious problems should keep you busy for hours. The objective of the game is this: You find yourself on a massive Spaceship armed with a collection of detonators and you must find all the large "X's" and place a detonator on each of them - this is done by standing on them. Sounds simple? It isn't! The spaceship is huge, is full if hidden traps and devious transporters and the "X's" are well hidden. I still haven't finished it but it has that "certain something" that keep you going back for more.

## THE MAZE - DATAFILE AND BORDER.

This game was written by DAVID SAMBROOK for the ATARI ST. I am sorry to say that I can't tell you anything about it because I have to assume that you need a 1 MEG machine to load it. Each time I try to load it into my half meg I get the message "Insufficient memory in the edit buffer for this operation". One of the members has kindly agreed to review it for me for the next Newsletter.

## ESKAPE - DATAFILE.

This game is written by STEVEN FLANAGAN for the COMMODORE 64. You are in the year 2002 and are imprisoned in a high security prison in Central for a crime you didn't do. The prison is hit by a powerful lightening bolt and you're the only survivor. The security systems are still intact (robots, detectors and cameras). You have a time limit to make your escape before reinforcements arrive. The game is very nicely programmed with plenty of problems to solve. You should find it most enjoyable. It comes with a detailed map and an instruction sheet.

## RACER ROUTINE and ESKAPE - DATAFILES

This disk contains a very interesting Racing routine written by STEVEN FLANAGAN. It is a bit slow in operation but the routines within it are most useful and interesting. The disk also contains the datafiles for ESKAPE (as above).

I also received a FLIGHT SIMULATOR DEMO program by R.SPREADBOROUGH which is written for the PC. Unfortunately I will have to review this another time when my PC is up and running.

All the disks are available from the usual address and cost just £1.50 each UK (£2.50 for overseas members). You are all invited to send in your contributions for the Library and it would be helpful if the datafiles could be included, if possible.

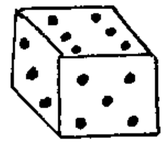


# 16-BIT ROUTINES

## RANDOM ROLLDICE ROUTINE

By *Fernando Carvalho* - ATARI ST

This rather interesting routine attempts to implement a RANDOM element into the Freescape system. The commands contained in this routine can be adapted for use in other types of routines where a random element is required. To use this routine you should first create six dice. Each die is created using a cube with tiny rectangles used for the spots (in each case use however many spots you want visible at a time. Rather like this:



When you have done so you should incorporate all the rectangles and cube into a GROUP. Continue in this way until you have six groups (one for each possible roll). Place each die on top of the previous one by making all of them invisible apart from the last one. In the routine below the groups (die) are numbered 18, 47, 70, 93, 117 and 140.

Create a TRIGGER object to "roll" the dice, in this case it is a flattened pyramid which is placed alongside the dice. A nice effect is also created by using a dark rectangle to form a shadow on the ground cube. When all this is done, create conditions as follows:

```
GENERAL CONDITION (1)
                        SETVAR (47,V100)

AREA CONDITION (1)
                        IF VAR<? (6,V19)
                        THEN SETVAR (0,V19)
                        ENDIF

        NB.Variable 19 is the 50Hz counter for accurate timing

TRIGGER CONDITION (Pyramid)
                        IF ACTIVATED?
                        THEN SETVAR (V19,V101)
                        EXECUTE (1)
                        ENDIF

CONDITIONS FOR THE ROUTINE
                        IF VAR=? (1,V101)
                        THEN INVIS (V100)
                        DELAY (25)
                        SETVAR (47,V100)
                        VIS (47)
                        END
                        ENDIF
                        IF VAR=? (2,V101)
                        THEN INVIS (V100)
                        DELAY (25)
                        SETVAR (93,V100)
                        VIS (93)
```

(Continued overleaf....)

```
END
ENDIF
IF VAR=? (3,V101)
THEN IVNIS (V100)
DELAY (25)
SETVAR (117,V100)
VIS (117)
END
ENDIF
IF VAR=? (4,V101)
THEN INVIS (V100)
DELAY (25)
SETVAR (140,V100)
VIS (140)
END
ENDIF
IF VAR=? (5,V101)
THEN INVIS (V100)
DELAY (25)
SETVAR (70,V100)
VIS (70)
END
ENDIF
IF VAR=? (6,V101)
THEN INVIS (V100)
DELAY (25)
SETVAR (18,V100)
VIS (18)
END
ENDIF
```

This routine was very exciting as none of us expected anyone to come up with a way of implementing a random element into the 3D Kit. I wonder what other exciting possibilities the Kit holds. If anyone doesn't feel like typing this all in, or would like to view the finished program then it is available complete in the PD library.

## SCREEN ICONS

By *James H. Yusuf* - AMIGA

In the Kitgame, included with the 3D Kit program, there is a General Condition that if you select a certain area of the screen it operates a function. In the game it activates the inventory list. This routine is a simpler version that prints a message if you click a small square in the top right hand part of the screen:

```
IF VAR>? (V18,50)
AND VAR<? (V17,300)
THEN IF VAR<? (V18,60)
AND VAR>? (V17,290)
THEN SETVAR (0,V17)
SETVAR (0,V18)
SOUND (4)
IF VAR>? (V100,0) This  variable can be used
                  for specific tasks.
```



```
                  THEN SETVAR (20,V35)  This  variable is text
                                        the timer.
                  PRINT (" Icon Activated ",5)
                  END
                  ENDIF
                  ENDIF
                  ENDIF Three ENDIF's for three IF's
```

## TRIGGER SWITCH FOR A SINGLE OBJECT

By *James H. Yusuf* - AMIGA

This is a routine for an object such as a button to open a door. Usually you need two switches, one to open the door and one to close the door. In this routine you only need one switch, activate once to open and again to close:

```
IF ACTIVATED?
AND VIS (1) - Is the open door visible?
THEN INVIS (1) - Then make it invisible.
VIS (2) -  And make open door visible.
ELSE IF VIS? (2)
THEN INVIS (2) -Same as above but vise-versa
VIS (1)
ENDIF
ENDIF
```

A neat trick to use is if you have two guns to pick up. Use this trigger routine so that if one disappears the other appears. This can be used in a great number of ways with other objects too.

## METRE LIMIT

By *James H. Yusuf* - AMIGA

If you have an object, say, a medical pack for your health level metre and you take this to cure yourself. Let us say your metre is from 0-100, 100 being the maximum and you have found your way into a room ful of such medical packs. If you kept taking the packs your metre would increase above the maximum level and could make the game a tad awkward, especially as you don't know how much health you have when it should be at 100. So a limit is needed. The limit will not be on the metre itself but on the medical pack, so it remains visible until used.

```
IF COLLIDED?
THEN IF VAR<? (V11,30)  -  If health is less
                           than 30.
THEN ADDVAR (59,V11) - Then add 50 to health
                       metre.
PRINT (" You are well.",5)
INVIS (1) - Object 1 is the medical pack.
ENDIF
ENDIF
```

Have YOU created any routines that you would like to share with the other users? If so, then please send them in for the next Newsletter - the more contributions received the more pages it will contain!

## ACCESSING AREAS

By *Mick Jolley* - SPECTRUM 128+2

It is time to grab the programmers by the short and curlies and pin them up against the wall to ask why can't you scroll past the bottom of the page in the GOTO AREA editor to be able to access the other 207 possible areas? If, like me, you have an adventure game with 130 areas needed, using the GOTO editor you can't access further than area 47!

Fear not me-hearties, there is a solution. Well a possible solution anyway. When you get to area 47, set up a local condition:

```
IFSHOT  129 - Global number for the floor.
THEN
GOTO    1   48
ENDIF
```

Do the same thing for all areas above 47. In area 48 the GOTO statement will read GOTO 49 and so on. This I fear maybe the only way, unless anyone knows an easier one?

*The programmers suggest that you create an area (say area 1) which contains say, 20 cubes and put a condition on each one such as:*

```
IFSHOT  1
THEN
GOTO    1   48
ENDIF
```

*And make a similar condition for each cube to take you to the areas you want. Of course this is only useful for you whilst programming and normal conditions will take the player wherever you wish during play. They suggest you use a couple of areas in this way and, of course, make them inaccessible to the player in your finished game. Whilst programming you then only have to use GOTO AREA and then shoot the cube that you need. You will still have to keep notes of which cube will access which area.....Mandy*

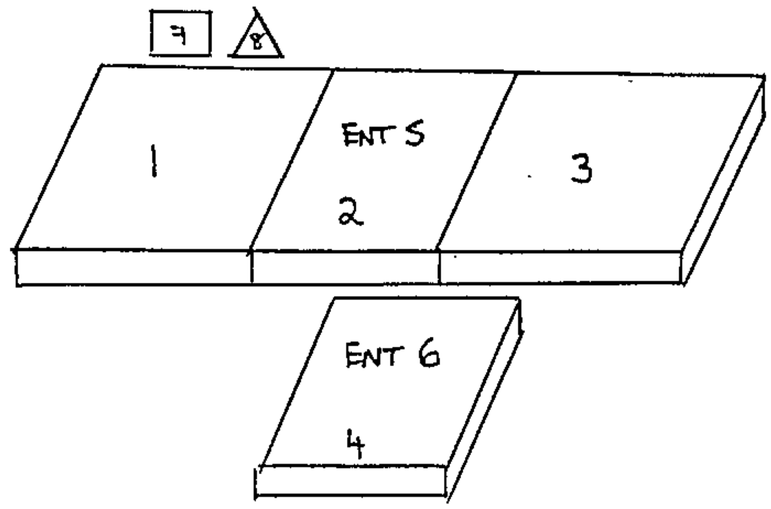
## HAVING TROUBLE WITH LIFTS?

By *Mick Jolley* - SPECTRUM 128+2

If you are having trouble with lifts then here is one solution. Let us say that you want the player to use a lift to get to a platform. Create your platform (Objects 1 and 3), then create your lifts (Objects 2 and 4). Stand on the lifts and create two entrances (5 and 6). Set the attribute for objects 2 and 4 both initially and currently to invisible.

Now create two switches say, 1 Quad and 1 Triangle (Objects 7 and 8) so that you have something which looks rather like this:






Now create the following conditions:

LOCAL CONDITION 1

```
IFHIT       129
OR
IFHIT       001
OR
IFHIT       003
THEN
SETV        000   010
ENDIF
IFHIT       002
OR
IFHIT       004
THEN
SETV        001   010
ENDIF
```

LOCAL CONDITION 2

```
IFSHOT      007 -
THEN              This bit ensures that
INVIS       002   when you hit the Quad
VIS         004   switch, only the lower
SYNCSND     004   lift is visible.
ENDIF
IFSHOT      008 - If the triangle is shot
THEN              then each lift in turn
TOGVIS      002   will be visible whether
TOGVIS      004   you are on the lift or
CALL        001   not.
ENDIF
```

PROCEDURE CONDITION 1

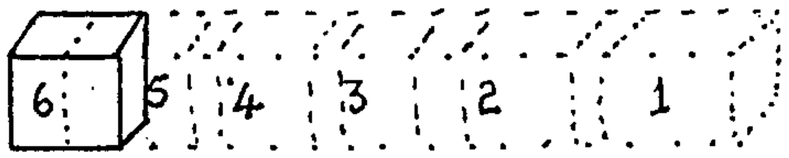
```
                CMPV        000     010 - This checks if you
                IFEQ                    are on the floor or
                THEN                    walkway.
                END
                ENDIF
                SYNCSND     004
                IFVIS       002
                THEN
                GOTO        005
                ELSE
                GOTO        006
                ENDIF
```

Now it's time to boil an egg, dip it in honey and throw it away - because I don't like eggs dipped in honey. I'll try to have another routine for next issue.

One more tip before I go. Please remember to record your efforts every step of the way. There is nothing worse than spending six hours or more on your game, deciding that it is time to get back to reality, only to realise that with your finger on the button you haven't recorded your game! Now I know what it is like to be a complete winkle!

## MOVEMENT ON 8-BIT MACHINES
By *A.P.Smith*

Here is an idea for creating the illusion of movement on an 8-bit machine. Place the object in its FINAL position and via the ATTRIBUTES make it invisible. Now place the second object to overlap the position of the first by one or two units. Repeat the process until the object is in its starting position:




A simple condition routine such as:

```
                TOGVIS      003
                TOGVIS      002
                REDRAW
                etc.
```

can be used to "move" the object from one spot to the other.

Any routines you have created for the 8-Bit machines will be greatly appreciated for the next issue so do please send them in.



## HINTS AND TIPS

TIPS by *Steven Flanagan* - COMMODORE 64

## USING FLY MODE

If you want your game to use FLY1 or FLY2 mode, entering the MODE command into GENERAL condition 1 doesn't work. This is because after the program has executed GENERAL CONDITION 1 it resets back to walk mode. So say you wish to use MODE 3 (FLY1) you must enter the command MODE 3 into either a LOCAL condition or a General condition above 2.

## MESSAGES

Don't print messages on your border as the message stays there indefinitely and ruins your border. Print messages in the View window.

## VERTICLE LINES

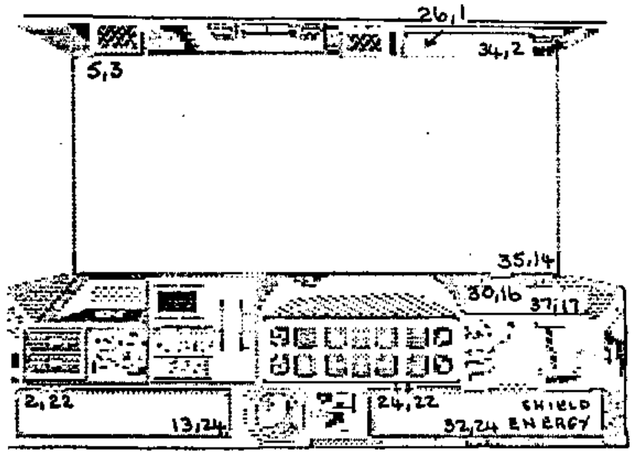
If you are having trouble getting straight lines to be verticle. If you wish to use two dimensional shapes do not use the POINT icons as each object has its own BOUNDING CUBE. No other objects can overlap the bounding cube and you cannot walk inside it. When you create a line it has an initial bounding cube of 8 x 8 x 8, which means that even if you use the point icons to make the line verticle and small it will still use up the same volume. To make it verticle use the shrink commands as this also shrinks the bounding cube. Shrink it as far as it will go in the X and Z planes, it will be verticle. Making sure that the bounding cube of a 2D object is as small as possible allows you to place other objects nearer to it.

## NIGHT AND DAY

In issue 4 Liam Johnston wondered how he could create a day/night situation so that the background sky colour would change when it becomes night or day. This could be done by creating five Rectangles. These could be moved to each edge of the area and stretched as far as they can go so they they form a complete box around the area. If you now colour all five of these rectangles black they give the illusion that the sky is black. Using a timer you can toggle the visibility of the rectangles to switch from night to day. 8-Bit users can use a much more atmospheric way. Select COLOUR AREA in the environment editor and colour the sky blue. Do this to all of your outdoor areas so that the sky is always blue outside. Now some sides of objects will be shaded blue. When you want the game to change to night, use the COLOUR command to change the sky colour to black (on CBM64 use COLOUR 0 0). This not only changes the sky to black but also turns all blue object sides to black too. This creates very atmospheric shadow illusions.

## PLACING INSTRUMENTS JUST RIGHT

If you want to use the DRILSCR border in your game it is very difficult to get your instruments in the right place. The following information is for C64 and I am not sure if it is accurate for other computers.




If you have just completed your masterpiece and now want to make a border you will have one heck of a problem fitting the border around your game instruments, as the only time you see them both together is when you have compiled the whole lot. If you own an Action Replay or similar cartridge then your problems will be solved. First load in the Condition Editor then your game. Select TEST from the menu so that your instruments can be seen. Now FREEZE the program with the cartridge and save the screen to tape or disk in the format of your Art Studio. Load in your Art Studio and load in the screen. You can now draw your border around the instruments to give perfect results. For those who have Action Replay but don't have an Art Studio I suggest you try to get hold of issue 3 of Commodore Format as the art package VIDCOM is included on the cassette.

TIP by *David Sexton* - SPECTRUM

This tip is useful for tape users. Instead of re-loading the editors or deleting loads of objects to clear the environment which is very time-consuming just SAVE the empty environment when first loading the editor. When you want to clear the environment you just LOAD your empty environment! This takes seconds only and you are ready to work.

TIPS by *James H. Yusuf* - AMIGA

## CHEATPROOFING!

Make all controls that are not needed the same on the CONTROL Menu, otherwise a smart player can activate one, such as change from WALK to FLY1 and cheat to get around a puzzle. By making them all the same the first one on the list will operate but none of the others that share the same key will.

## FAST MOVER

To move even faster in your 3D World, press the forward key on the keyboard and the forward icon with the mouse (use right mouse button as it moves a lot faster). This can be used in both TEST and EDIT modes. Be careful not to exit the area you are in as some strange things can happen, like a Guru!



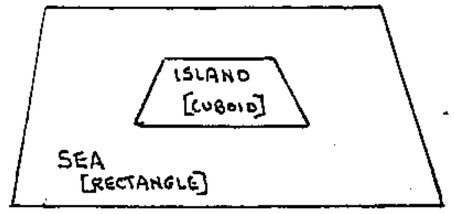
## PROFESSIONAL TOUCHES

If you have a computer within your world, make the information that is contained inside it appear on the main screen and not the small text window that you use, like the beginning of the Kitgame. It is a simple idea but it makes the game look more professional. Also make sure you put a REDRAW command at the end of your text condition and that the text window is the same size as the View window.

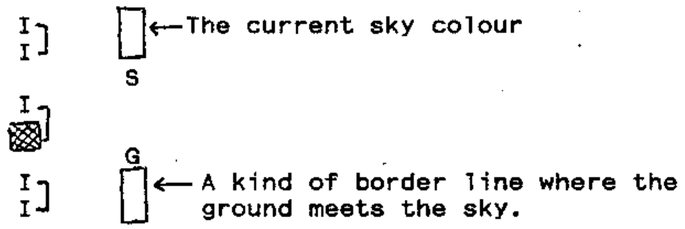
TIPS by *Andrew Herbert* - AMIGA

## A BETTER DESERT ISLAND

If you have ever tried to create a desert island you would know that if you wanted to have the sea surrounding the island like this:




The sea would have a kind of "rough edge". You could always use Horizon Off but that sometimes can be the long way round as it takes a lot of time to implement. In colour mode at the far left is a gadget to colour the sides of an object. Simply colour the box marked "G" to the colour of the sea and Hey Presto! you have a sea with no "rough edges".




## SAVING THE IFF WAY

By pressing F2 at any time during work you may save the current screen as an IFF file which can be loaded into any paint package which handles IFF files. You can even save the control panel on the editor!

## STOP THE IRRITATING F1!

You must have noticed, whilst in TEST mode that when you want to return to the Editor pressing the F1 key tends to repeat itself, returning to the Editor for a brief second and then turning back to the Test window! You can prevent this by placing the curser at the top of the screen, then pressing F1. The menu bar now stops the Test screen reappearing!

Have YOU any helpful hints or tips that you would like to share with the other members? All contributions will be gratefully received so don't be shy!

# PROBLEM PAGES

## *Dear Mandy*

Is it possible to animate an object so that it rotates? If so, how? On the Amiga how do you use a Sensor to start an animation or some other routine (I have looked everywhere in the manual and can't find the information). Also whenever I edit an entrance and then come back into that area I always find myself in a completely different place from where I set the entrance to put me. Perhaps you could tell me how I could get it to work properly?

## *Richard Pepper*

It isn't possible to animate an object to rotate it on this version of the Kit. I hope in a future version it will be possible. To use a Sensor to start an animation, or indeed another routine, you should use System Variable 11 which counts the number of times you have been shot by a Sensor. For example create a Sensor and make it invisible via the ATTRIBUTES (both currently and initially) then use the ground cube as a trigger to make it visible when the ground cube is shot. i.e.

```
IF SHOT?
THEN VIS (2)
ENDIF
```

Then enter the following Area Condition:

```
IF VAR=? (20,V11)
THEN ENDGAME
ENDIF
```

Select RESET before we try this as when we created the Sensor it shot at us before we could make it invisible. Shoot the ground and after the Sensor has shot us 20 times the game will end (well for our purposes it will RESET and the Sensor will become invisible again.

I think your problems with the Entrances could be that when selecting GOTO AREA you forget to select GOTO ENTRANCE so that you may select the entrance that you want. Don't forget that using the CAMeras you can also set your viewpoint to desired spots all around the area you are creating which makes life a lot easier. Hope this information helps.

## *Dear Mandy*

Please can you help me? After working on my environment for a time, when I load some more objects they don't appear clearly on the screen and then if I delete some or other the elements of the objects seem to appear one by one. This happens when I have about 70 elements in the table for an area. If I then select an invisible group whose component attributes are visible and select HIGHL its envelope is flashing, if I select EXCL the object appears normally. Can you please help me so I can draw my kitchen or house?

## *P. Codron*

I think all your problems will be solved if you limit the number of objects strictly to 60 in each area. If you use any more objects than that then things start to go wrong in all sorts of weird and wonderful ways. Perhaps you could use a little care by say, making all the objects in the first part of your area visible and the other half invisible and when you move towards the second half of your area you would have a condition to toggle the visibility of the objects. In this way you could have more objects and the speed of movement would be much quicker but I wouldn't like to advise you to have more than 60 in any case as things may look okay but it might have created a problem in another area! I created 65 objects once and everything seemed alright until I selected GOTO AREA and found that instead of having my area names on the list I had things like CUBOID 6 and PYRAMID 10 mixed up with the Area list. I had to scrap the lot!



## *Dear Mandy*

I have a small problem. I am not quite clear about Variables. Looking at the Kitgame thoroughly so as to understand the makeup of the conditions I have established that Variables 1, 6, 7, 8 and 9 ralate to the four Instruments used in the game. I also realise that Variables 120 and 121 are System Variables. What I don't understand are the Variables 10, 11, 12, 13, 14, 15, 16 and 17. I keep coming across them in General/Local/Procedure Conditions but I am at a loss as to how they are established and what they relate to.

## *George Rawson*

As you only just subscribed to the User Group you missed out on the early issues, one of which contained the complete list of all the Variables used in the Kitgame. For those who missed them they are:

```
1 - Time
2 - Combination carried? 0 - No. 1 - Yes.
3 - Exit pass carried?   0 - No. 1 - Yes.
4 - Key carried?         0 - No. 1 - Yes.
5 - Teleport counter     0 - Initial. 1 - Demon Head. 2 - Desert
                         Island. 3 - Not Operated.
6 - Score
8 - Energy
9 - Treasure Found
10- Stamper position (0-3) Area 9
11- 0 - if on floor. 1 - if on lift platform.
12- Area 3 mode.         0 - walking. 1 - Crawling.
13- End of game.         0 - No. 1 - Yes.
14- Energy past minimum. 0 - NO. >1 - Yes.
16- Shoot counter
17- Commodore 64 version Text Clear Flag.
```

There are many interesting routines, hints and tips in ALL the Newsletters. All the back issues are available if anyone has missed them. They cost £2 each (UK), £2.50 each (Europe) and £3 (Rest of the World). If anyone wants back issues just write, enlosing payment and tell me which issues you require and I'll send them on to you. It is worth noting that issue 1 contains material which is 16-bit specific as the 8 bit versions of the Kit were not out at the time of going to press. From issue 2 onwards equal coverage has been given to both 8 and 16 bit versions. Should be something to interest everyone there somewhere!

*****

Send your problems in and I'll do my best to solve them. Please remember that a problem shared is often a problem solved. It might be that someone else has been stuck with the same problem so don't be shy - you could be helping someone else at the same time!